AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of providing an advance screen saver warning for a display ~~system~~ apparatus, the method comprising:

predetermining a screen saver standby time and an advance screen saver warning time;

counting a current system idle time during which no system input activity is detected; and

activating an advance screen saver warning before activating a screen saver if the current system idle time is greater than or equal to a time difference between the screen saver standby time and the advance screen saver warning time,

wherein the activated advance screen saver warning is continuously executed by the display apparatus until a detection of system activity, whereupon the advance screen saver warning is deactivated, and

wherein the screen saver is activated only if the advance screen saver warning time is completed.

2. (Original) The method of claim 1, further comprising deactivating the advance screen saver warning and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time.

3. (Original) The method of claim 2, wherein the deactivating the advance screen saver warning and the activating the screen saver are performed simultaneously.

4. (Original) The method of claim 1, further comprising deactivating the advance screen saver warning if any system input activity is detected.

5. (Currently Amended) The method of claim 1, wherein the activating [[an]] the advance screen saver warning comprises displaying a warning message window on a display screen, the warning message window indicating a time remaining until the screen saver is activated.

6. (Original) The method of claim 5, wherein the remaining time is calculated by subtracting the current system idle time from the screen saver standby time.

7. (Original) The method of claim 5, wherein the warning message window includes at least one of a textual representation and a graphical representation indicating the remaining time.

8. (Original) The method of claim 7, wherein the graphical representation included in the warning message window is any one of a bar-type graph, a clock-type graph with a moving indicator, and a pie-type graph.

9. (Original) The method of claim 5, wherein the warning message window is displayed on a predetermined screen portion of the display screen, which is automatically determined by default or is manually determined by an operator.

10. (Original) The method of claim 5, further comprising undisplaying the warning message window from the display screen if any system input activity is detected.

11. (Original) The method of claim 5, further comprising undisplaying the warning message window and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time.

12. (Original) The method of claim 5, wherein the warning message window is an on-screen-display (OSD) window.

13. (Currently Amended) The method of claim 1, wherein the activating [[an]] the advance screen saver warning comprises outputting a predefined warning sound through a speaker.

14. (Original) The method of claim 13, wherein the predefined warning sound is any one of a computer-generated sound and a human voice indicating a time remaining until the screen saver is activated.

15. (Original) The method of claim 1, wherein the screen saver standby time is a total length of system idle time that must elapse before activating the screen saver.

16. (Original) The method of claim 1, wherein the advance screen saver warning time is a length of time during which the advance screen saver warning is continuously activated before activating the screen saver.

17. (Original) The method of claim 1, wherein the screen saver standby time is predetermined to an automatically assigned default value or a manually selected value.

18. (Original) The method of claim 1, wherein the advance screen saver warning time is predetermined to an automatically assigned default value or a manually selected value.

19. (Original) The method of claim 1, wherein the system input activity includes at least one of a horizontal synchronization signal, a vertical synchronization signal, and a manual user input.

20. (Original) The method of claim 19, wherein the manual user input is made by a user through a keyboard or mouse.

21. (Currently Amended) A display apparatus for providing an advance screen saver warning, the apparatus comprising:

a parameter set unit for predetermining a screen saver standby time and an advance screen saver warning time;

Birch, Stewart, Kolasch & Birch, LLP

a counter for counting a current system idle time during which no system input activity is detected; and

a controller, coupled to the parameter set unit and the counter, for activating an advance screen saver warning before activating a screen saver if the current system idle time is greater than or equal to a time difference between the screen saver standby time and the advance screen saver warning time,

wherein the activated advance screen saver warning is continuously executed by the display apparatus until a detection of system activity, whereupon the advance screen saver warning is deactivated, and

wherein the screen saver is activated only if the advance screen saver warning time is completed.

22. (Original) The display apparatus of claim 21, wherein the controller further deactivates the advance screen saver warning and simultaneously activates the screen saver when the current system idle time is greater than or equal to the screen saver standby time.

[[22]]23. (Currently Amended) The display apparatus of claim 21, wherein controller deactivates the advance screen saver warning if any system input activity is detected.

[[23]]24. (Currently Amended) The display apparatus of claim 21, further comprising:

a message window generator coupled to the controller for generating an image signal representative of a warning message window indicating a time remaining until the controller activates the screen saver; and

a display screen coupled to the message window generator for receiving the image signal and displaying the warning message window.

[[24]]25. (Currently Amended) The display apparatus of claim 2324, wherein the controller calculates the remaining time by subtracting the current system idle time being counted by the counter from the screen saver standby time.

Application No. 10/747,949   Docket No.:0465-1116PUS
Amendment dated May 18, 2007   Page 8
Reply to Office Action dated February 21, 2007

[[25]]26. (Currently Amended) The display apparatus of claim 2324, wherein the warning message window includes at least one of a textual representation and a graphical representation indicating the remaining time.

[[26]]27. (Currently Amended) The display apparatus of claim 2526, wherein the graphical representation included in the warning message window is any one of a bar-type graph, a clock-type graph with a moving indicator, and a pie-type graph.

[[27]]28. (Currently Amended) The display apparatus of claim 2324, wherein the warning message window is displayed on a predetermined screen portion of the display screen, the predetermined screen portion being automatically determined by the controller or being manually determined by an operator.

[[28]]29. (Currently Amended) The display apparatus of claim 2324, wherein the controller sends an interruption signal to the message window generator in order to undisplay the warning message window from the display screen when any system input activity is detected.

[[29]]30. (Currently Amended) The display apparatus of claim 2324, wherein the controller activates the screen 'saver and simultaneously sends an interruption signal to the message window generator in order to undisplay the warning message window when the current system idle time being counted by the counter is greater than or equal to the screen saver standby time.

[[30]]31. (Currently Amended) The display apparatus of claim 2324, wherein the message window generator is an on-screen-display (OSD) window generator, and the warning message window is an OSD window.

Birch, Stewart, Kolasch & Birch, LLP

[[31]]32. (Currently Amended) The display apparatus of claim 21, further comprising a speaker coupled to the controller for outputting a predefined warning sound, wherein the predefined warning sound is any one of a computer-generated sound and a human voice indicating a time remaining until the controller activates the screen saver.

[[32]]33. (Currently Amended) The display apparatus of claim 21, wherein the screen saver standby time predetermined by the parameter set unit is a total length of system idle time that must elapse before the controller activates the screen saver.

[[33]]34. (Currently Amended) The display apparatus of claim 21, wherein the advance screen saver warning time is a length of time during which the controller continuously activates the advance screen saver warning before activating the screen saver.

[[34]]35. (Currently Amended) The display apparatus of claim 21, further comprising a sync detector coupled to the controller for detecting at least one of a horizontal synchronization signal and a vertical synchronization signal, wherein the system input activity comprises the at least one of horizontal and vertical synchronization signals.

[[35]]36. (Currently Amended) The display apparatus of claim 21, further comprising a key input unit coupled to the controller for receiving a manual user input from an operator, wherein the system input activity comprises the manual user input.

[[36]]37. (Currently Amended) The display apparatus of claim 3536, wherein the key input unit is any one of a keyboard or mouse.

[[37]]38. (Currently Amended) The display apparatus of claim 21, further comprising a memory coupled to the controller for storing the predetermined screen saver standby time and advance screen saver warning time.

Birch, Stewart, Kolasch & Birch, LLP

[[38]]39. (Currently Amended) The display apparatus of claim 3738, wherein the memory is an Electrically Erasable Programmable Read-only Memory (EEPROM).

40. (New) The method of claim 1, further comprising:

controlling, during the continuous execution of the advance screen saver warning, the display apparatus to output at least one of an audible pattern and a visible pattern indicative of the time difference between the screen saver standby time and the advance careen saver warning time.

41. (New) The method of claim 40, wherein the at least one of the audible pattern and the visible pattern is initiated based on the counting of said current system idle time and is discontinued by detection of system input activity.

42. (New) The apparatus of claim 21, wherein, during the continuous execution of the advance screen saver warning, the display apparatus is controlled by said controller to output at least one of an audible pattern and a visible pattern indicative of the time difference between the screen saver standby time and the advance screen saver warning time.

43. (New) The apparatus of claim 42, wherein the at least one of the audible pattern and the visible pattern is initiated based on the counting of said counter and is discontinued by detection of system activity.